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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,199	07/01/2003	Steven R. Levine	5658/932	4094
757	7590	06/07/2004	EXAMINER	
BRINKS HOFER GILSON & LIONE			COURSON, TANIA C	
P.O. BOX 10395			ART UNIT	
CHICAGO, IL 60610			PAPER NUMBER	
			2859	

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

apw

<b>Office Action Summary</b>	<b>Applicati n N .</b>		<b>Applicant(s)</b>	
	10/612,199		LEVINE ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Tania C. Courson		2859	

-- The MAILING DATE of this c mmunication appears n the cover sh et with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-80 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>26SEP03,23OCT03</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1-13 are objected to because of the following informalities:
  - a) claims 1-13, line 1, respectively, "The attachment of claim " should refer to its associated preamble, "A stud finder", and;
  - b) claim 13, line 3, "a stud finder" should read "said stud finder".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 6-8, 11-12, 14, 18-19, 24, 26-28, 33, 52, 58-59, 62 and 64-65 are rejected under 35 U.S.C. 102(e) as being anticipated by Gardiner et al. (US 2004/0016058 A1).

Gardiner et al. disclose in Figures 1-28, a multi-purpose device comprising:

With respect to claim 1:

- a) a surface (Fig. 3, module 14), a connection structure (Fig. 3, flanges 23 and 25) on the surface to removably mount either a light generating device or a leveling device thereto (Fig. 3, LED 158 and paragraph 84).

With respect to claim 14:

- a) a stud finder (Fig. 3 and 9, stud finder module 414) comprising a connection structure (Fig. 3, flanges 23 and 25), a surface (Fig. 3 and 9, stud finder module 14), and a light generating device removably attached to said stud finder via said connection structure (Fig. 3, LED 158).

With respect to claim 26:

- a) a stud finder (Fig. 3 and 9, stud finder module 414) comprising a connection structure (Fig. 3, flanges 23 and 25), a surface (Fig. 3 and 9, stud finder module 14), and a leveling device removably attached to said stud finder via said connection structure (paragraph 84).

With respect to claim 52:

- a) a container defining a volume of space (Fig. 3 and 9, stud finder module 414), a stud finder positioned within the volume of space (Fig. 3 and 9, stud finder module 414), the stud finder comprising a surface (Fig. 3 and 9, stud finder module 414), and a connection structure (Fig. 3, flanges 23 and 25), and a light generating device positioned within the volume of space so as to be unattached to the stud finder (Fig. 3, LED 158), wherein the connection structure can be used to removably mount the light generating device to the surface (Fig. 3).

With respect to claim 62:

- a) a container defining a volume of space (Fig. 3 and 9, stud finder module 414), a stud finder positioned within the volume of space (Fig.

3 and 9, stud finder module 414), the stud finder comprising a surface (Fig. 3 and 9, stud finder module 414), and a connection structure (Fig. 3, flanges 23 and 25), and a leveling device positioned within the volume of space so as to be unattached to the stud finder (paragraph 84), wherein the connection structure can be used to removably mount the light generating device to the surface (Fig. 3).

With respect to claims 6-8, 11-12, 18-19, 24, 27-28, 33, 58-59, and 64-65:

- a) wherein the surface comprises a flat surface and a recess for holding either a light generating device or a leveling device (Fig. 3, stud finder module 414);
- b) wherein the connection structure comprises a latch for releasably holding a light generating device or a leveling device (Fig. 3, flanges 23 and 25);
- c) wherein the connection structure is selected from the group consisting of a magnet, a magnetically attractive material, a hook fastener, a loop fastener, a tab, a slot, a flat surface, and a latch (Fig. 3, flanges 23 and 25);
- d) further comprising a capacitive sensor for detecting objects behind walls (Fig. 8);
- e) wherein the surface is rotatably mounted relative to said connection structure (Fig. 3), and;

f) further comprising at least one LED (Fig. 9, lights 416 and 418).

4. Claims 43-44 and 48-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Gardiner et al.

Gardiner et al. disclose in Figures 1-28, a multi-purpose device and associated method comprising:

- a) inserting a leveling device into a structural detector (Fig. 3 and 9, stud finder module 414 and paragraph 84), the structural detector comprising a connection structure to mount the leveling device thereto (Fig. 3, flanges 23 and 25), a surface (Fig. 3 and 9, stud finder module 414), placing the surface against a wall (Fig. 9 and paragraph 86), locating at least one concealed feature underneath the wall using the structural detector (Fig. 9 and paragraph 86), and marking the wall along a line defined by the leveling device (Fig. 9 and paragraph 86);
- b) wherein the leveling device comprises a light generating device (Fig. 3, LED 158);
- c) further comprising sighting on a distant object using light from the light generating device before the step of marking the wall (Fig. 3 and 9);
- d) further comprising connecting a battery to at least one of the structural detector or the light generating device (Fig. 3, battery 244 and paragraph 125).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-5, 9-10, 13, 15-17, 20-23, 25, 29-32, 34, 35-42, 53-57, 60-61, 63 and 66-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardiner et al. in view of Chen (EPO 416162 A1), Audet (US 6,266,006 B1), Ackeret et al. (US 2003/0106159 A1), Goodrich et al. (US 6,502,319 B1) and Acopulos (US 5,713,135).

Gardiner et al. disclose a multipurpose device, as stated above in paragraph 3.

Gardiner et al. do not disclose the following:

- a) a marking feature, wherein the marking feature is selected from the group consisting of a sharp point, a pencil, a pen, a felt-tipped pen, a marking pin, and a spring-biased marking pin, wherein the surface has at least one orifice for receiving at least one of a marking pin and a touch switch, at least one spring-loaded marking pin and an actuator for the pin;
- b) a normally-open switch on the surface and protruding through the surface for activating a detector;
- c) wherein the light generating device generates a laser beam;
- d) wherein the light generating device generates light in the shape of a fan with an asymmetric intensity, a housing with a surface that extends along a first

planar surface and the fan substantially lying within a plane that intersects the first planar surface at an angle, wherein the connection structure comprises a magnet, wherein the connection structure comprises a material that is magnetically attracted to the light generating/leveling device;

- e) wherein the light generating/leveling device further comprises at least one retractable pin and an actuator for the pin.

Chen teaches a stud finding device that consists of a marking feature (Fig. 4, marking element 6), wherein the marking feature is selected from the group consisting of a sharp point, a pencil, a pen, a felt-tipped pen, a marking pin, and a spring-biased marking pin (Fig. 4), wherein the surface has at least one orifice for receiving at least one of a marking pin and a touch switch (Fig. 4), at least one spring- loaded marking pin and an actuator for the pin (Fig. 4, spring elements 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the multi-purpose device of Gardiner et al., so as to include a marking feature, as taught by Chen, so as to facilitate the means of marking during use of the device.

Audet teaches a detecting device that consists of a normally-open switch on the surface and protruding through the surface for activating a detector (Fig. 1, push button 62). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the multi-purpose device of Gardiner et al., so as to



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include a switch, as taught by Audet, so as to facilitate activating the device during use of the device.

Ackeret et al. teach a multi-purpose device that consists of wherein the light generating device generates a laser beam (Fig. 52e, laser unit outlet opening 313). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the multi-purpose device of Gardiner et al., so as to include a laser beam, as taught by Ackeret et al., so as to provide additional lighting features during use of the device.

Goodrich et al. teach a lighting/leveling device that consists of wherein the light generating device generates light in the shape of a fan (Fig. 8, fan shaped beam 26) with an asymmetric intensity (column 2, line 64 through column 3, lines 8), a housing with a surface that extends along a first planar surface and the fan substantially lying within a plane that intersects the first planar surface at an angle (Fig. 8), wherein the connection structure comprises a magnet (Fig. 10, magnet 45), wherein the connection structure comprises a material that is magnetically attracted to the light generating/leveling device (Fig. 10, magnet 45). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the multi-purpose device of Gardiner et al., so as to include a fan shaped light and a magnet, as taught by Goodrich et al., so as to provide a greater enhancement in visibility and to further enhance the ability of the device to be secured to another surface.

Acopulos teaches a multi-purpose device that consists of wherein the light

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generating/leveling device further comprises at least one retractable pin and an actuator for the pin (Fig. 6, retractable pin 62). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the multi-purpose device of Gardiner et al., so as to include a retractable pin, as taught by Acopulos, so as to provide a means for marking during use of the device.

7. Claims 45-47 and 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardiner et al. in view of Ackeret et al., Goodrich et al. and Chen

Gardiner et al. disclose a multipurpose device, as stated above in paragraph 4.

Gardiner et al. do not disclose the following:

- a) wherein the light generating device generates a laser beam;
- b) wherein the light generating device generates light in the shape of a fan with an asymmetric intensity;
- c) further comprising the step of marking the wall using a marking device attached to the structural detector and wherein the marking device is selected from the group consisting of a sharp point, a pencil, a pen, a felt-tipped pen, a marking pin, and a spring-biased marking pin.

Ackeret et al. teach a multi-purpose device that consists of wherein the light generating device generates a laser beam (Fig. 52e, laser unit outlet opening 313). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was

made to further modify the multi-purpose device of Gardiner et al., so as to include a laser beam, as taught by Ackeret et al., so as to provide additional lighting features during use of the device.

Goodrich et al. teach a lighting/leveling device that consists of wherein the light generating device generates light in the shape of a fan (Fig. 8, fan shaped beam 26) with an asymmetric intensity (column 2, line 64 through column 3, lines 8). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the multi-purpose device of Gardiner et al., so as to include a fan shaped light, as taught by Goodrich et al., so as to provide a greater enhancement in visibility during use of the device.

Chen teaches a stud finding device that consists of further comprising the step of marking the wall using a marking device attached to the structural detector (Fig. 4, marking element 6) and wherein the marking device is selected from the group consisting of a sharp point, a pencil, a pen, a felt-tipped pen, a marking pin, and a spring-biased marking pin (Fig. 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the multi-purpose device of Gardiner et al., so as to include a marking feature, as taught by Chen, so as to facilitate the means of marking during use of the device.

8. Claims 68, 71-75 and 78-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardiner et al. in view of Audet.

Gardiner et al. disclose a multipurpose device, including the following:

- a) a stud finder comprising a connection structure, a surface;
- b) wherein the connection structure is selected from the group consisting of a magnet, a magnetically attractive material, a hook fastener, a loop fastener, a tab, a slot, a flat surface, and a latch;
- c) further comprising a controller and a capacitive sensor and at least one light source connected to the controller;
- d) further comprising a light generating device mounted to the connection structure;
- e) wherein the light generating device comprises a connection structure complementary to the connection structure of the stud finder.

Gardiner et al. do not disclose the following:

- a) a normally-open switch protruding through the surface

Audet teaches a detecting device that consists of a normally-open switch protruding through the surface (Fig. 1, push button 62). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the multi-purpose device of Gardiner et al., so as to include a switch, as taught by Audet, so as to facilitate activating the device during use of the device.

9. Claims 69-70 and 76-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardiner et al. and Audet, as applied to claims 68, 71-75 and 78-80 as stated above, and further in view of Chen.

Gardiner et al. and Audet disclose a multipurpose device as stated above in paragraph 8.

They do not disclose the following:

- a) a marker selected from the group consisting of a sharp point, a pencil, a pen, a felt-tipped pen, a marking pin and a spring-biased marking pin;
- b) wherein the marker is contained within the device.

Chen teaches a stud finding device that consists of a marker selected from the group consisting of a sharp point, a pencil, a pen, a felt-tipped pen, a marking pin, and a spring-biased marking pin (Fig. 4, marking element 6) and wherein the marker is contained within the device (Fig. 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the multi-purpose device of Gardiner et al., so as to include a marker, as taught by Chen, so as to facilitate the means of marking during use of the device.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art cited on PTO-892 and not mentioned above disclose a detecting device:

Boys (US 2004/0078990 A1)

Malard et al. (US 2002/0178596 A1)

Luebke (US 2001/0053313 A1)

Moretti (US 6,493,955)

Miller (US 6,421,928 B1)

Bijawat et al. (US 6,360,446 B1)

Bijawat et al. (US 6,211,662 B1)

Anderson (US 5,967,645)

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tania C. Courson whose telephone number is (571) 272-2239.

The examiner can normally be reached on Monday-Friday from 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez, can be reached on (571) 272-2245.

The fax number for this Organization where this application or proceeding is assigned is (703) 872-9306.



DIEGO F.F. GUTIERREZ  
SUPERVISORY PATENT EXAMINER  
GROUP ART UNIT 2859